

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 99104

TO: Robert Mondesi

Location: CM1/5D16&9B01

Art Unit: 1653 July 29, 2003

Case Serial Number: 09/825399

From: P. Sheppard Location: CM1-1E03 Phone: (703) 308-4499

sheppard@uspto.gov

Search Notes

99104

Access	DR#		

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Kobert Mondes, Examiner #: 79912 Date:
Art Unit: 1653 Phone Number 305 - 4445 Serial Number: 09825399
Art Unit: 1653 Phone Number 305-4445 Serial Number: 09825399 Mail Box and Bldg/Room Location: Results Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is submitted, please prioritize searches in order of need.
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.
Inventors (please provide full names): Inventors (please provide full names):
Inventors (please provide full names):
Chan, Kevin X; Arasappan, Ashak; Venkatraman, Srikart
Earliest Priority Filing Date: 4-20-2001
For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Care structure must remain constant. Search for veriable.

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FILE COVERS 1907 - 29 Jul 2003 VOL 139 ISS 5 FILE LAST UPDATED: 28 Jul 2003 (20030728/ED)

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NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE

L3 33 SEA FILE=REGISTRY SSS FUL L1
L4 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

28

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ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:763001 HCAPLUS

DOCUMENT NUMBER: 135:318715

TITLE: Preparation of macrocyclic NS3-serine protease

inhibitors of hepatitis C virus comprising n-cyclic p2

INVENTOR(S): Chen, Kevin X.; Arasappan, Ashok; Venkatraman,

Srikanth; Parekh, Tejal N.; Gu, Haining; Njoroge, F. George; Girijavallabhan, Viyyoor M.; Ganguly, Ashit; Saksena, Anil; Jao, Edwin; Yao, Nanhua H.; Prongay, Andrew J.; Madison, Vincent S.; Vibulbhan, Bancha

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 402 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT I	NO.	KIND	DATE		А	PPLI	CATI	ои и	0.	DATE			
WO 20010)//II3	АЗ	2001101	0								•	
₩:	AE, AG, CO, CR, IL, IN, MK, MN,	AL, AM CZ, DE IS, JP MX, MZ	, AT, AU , DK, DM , KG, KR , NO, NZ , UA, UZ	, AZ, , DZ, , KZ,	LC, PT.	ES, LK, RO.	FI, LR, RU.	GB, LT, SE	GD, LU,	GE, LV,	HR, MA,	HU, MD,	ID, MG,
US 20021 EP 12685	GH, GM, DE, DK, BJ, CF, 07181 25	CG, CI A1 A2	2003010	, GR, , GN, 8 2	IE, GW, US	IT, ML, 5 200	LU, MR, 01-82	MC, NE, 25399	NL, SN, 9	PT, TD, 20010	SE, TG 0403	TR,	BF,
K:	AT, BE, IE, SI, 09861 04797 N. INFO.	LT, LV A A	, DK, ES , FI, RO 20030610 20021204	, FR, , MK,) 1	GB, CY, BF NC US 20	GR, AL, R 200 200 000-1	IT, TR)1-98)2-47	LI, 361 797 97P	LU,	NL,	SE, 0403 1004 0405	MC,	PT,

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein X and \dot{Y} = independently (cyclo)alkyl, AB heteroalkyl, (aryl)heteroaryl, alkyl(hetero)aryl, substituted ether, sulfide, sulfone, amide, sulfonamide, urea, carbamate, hydrazide, carbonyl, etc.; R1 = CHO, acyl, or (un)substituted carboxy, carbamoyl, boryl, etc.; Z = O, N, or CH, W = null or CO, CS, or SO2; Q = null or CH, N, P, (CH2)p, (CHR)p, (CRR')p, O, NR, S, or SO2; A = O, CH2, (CHR)p, (CHRCHR')p, (CRR')p, NR, S, SO2, or a bond; E = CH, N, CR, or a double bond toward A, L, or G; G = null or (CH2)p, (CHR)p, or (CRR')p; J = null or CH, CR, O, S, or NR; M = null or O, NR, S, SO2, "(CH2)p, (CHR)p, (CHRCHR')p, or (CRR')p; p = 0-6; R, R', R2, R3, and R4 = independently H, (cyclo)alkyl, alkenyl, heterocycloalkyl, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, ester, carboxylic acid, carbamate, urea, ketone,

Mondesi 09_825399-B

CHO, CN, NO2, O, N, S, P, etc.] were prepd. as hepatitis C virus (HCV)

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protease inhibitors. For example, II (multi-step prepn. given) was cyclized, deesterified, and coupled with III.bul.HCl (prepn. given) to give the macrocyclic hydroxyamide intermediate. Oxidn. using Des-Martin reagent followed by flash chromatog. afforded two diastereomers IV in 82% combined yield. The (S)-isomer inhibited NS3-serine protease HeLa/Huh7 co-transfected cells with a Ki of 2 .mu.M. The invention also discloses pharmaceutical compns. comprising I as well as methods of using them to treat disorders assocd. with the HCV protease. 367257-61-2P 367257-62-3P 367257-96-3P 367258-03-5P 367258-08-0P 367258-09-1P 367258-10-4P 367258-11-5P 367258-12-6P 367258-13-7P 367258-14-8P 367258-15-9P 367258-16-0P 367258-17-1P 367258-18-2P 367258-19-3P 367258-20-6P 367258-21-7P 367258-22-8P 367258-23-9P 367258-24-0P 367258-25-1P 367258-26-2P 367258-27-3P 367258-28-4P 367258-29-5P 367258-30-8P 367258-31-9P 367258-32-0P 367258-33-1P 367258-34-2P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of macrocyclic NS3-serine protease inhibitors of hepatitis C virus comprising cyclic p2 moieties) 368871-35-6P 368871-36-7P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of macrocyclic NS3-serine protease inhibitors of hepatitis C virus comprising cyclic p2 moieties) => fil reg FILE 'REGISTRY' ENTERED AT 18:57:06 ON 29 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS) Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem. STRUCTURE FILE UPDATES: 28 JUL 2003 HIGHEST RN 556740-18-2 DICTIONARY FILE UPDATES: 28 JUL 2003 HIGHEST RN 556740-18-2 TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003 Please note that search-term pricing does apply when conducting SmartSELECT searches. Crossover limits have been increased. See HELP CROSSOVER for details. Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

- ANSWER 1 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3
- RN 368871-36-7 REGISTRY
- CN Glycine, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2hydroxyhexanoylglycyl-2-phenyl-, 1,1-dimethylethyl ester, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)
- PROTEIN SEQUENCE; STEREOSEARCH FS
- MF C46 H65 N5 O10
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL
- **RELATED SEQUENCES AVAILABLE WITH SEQLINK**

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 2 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN 368871-35-6 REGISTRY

Glycinamide, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3-CN methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2hydroxyhexanoylglycyl-N,N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S) - (9CI)(CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C44 H62 N6 O9

SR

LC STN Files: CA, CAPLUS, USPATFULL

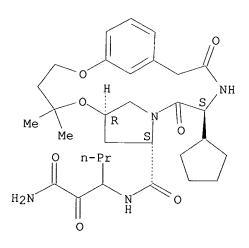
RELATED SEQUENCES AVAILABLE WITH SEQLINK

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 135:318715 REFERENCE

- L3 ANSWER 3 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN 367258-34-2 REGISTRY
- RN
- 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CNcarboxamide, N-[1-(aminooxoacetyl)butyl]-12-cyclopentyl-5,5-dimethyl-11,14dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C31 H44 N4 O7
- SR CA
- LCSTN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 4 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

367258-33-1 REGISTRY RN

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 12-cyclopentyl-5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]butyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C34 H48 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 5 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN367258-32-0 REGISTRY

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, N-[1-(aminooxoacetyl)butyl]-5,5-dimethyl-12-[(1S)-1methylpropyl]-11,14-dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C30 H44 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 6 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-31-9 REGISTRY

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 5,5-dimethyl-12-[(1S)-1-methylpropyl]-11,14-dioxo-N-[1-[oxo(2-1)]-11,14-dioxo-N-[1-[oxo(2-1)]-11]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-dioxo-N-[oxo(2-1)]-11,14-diox propenylamino)acetyl]butyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H48 N4 O7

SR

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3

RN

ANSWER 7 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN 367258-30-8 REGISTRY Glycinamide, N-[[3-(3-hydroxy-3-methylbutoxy)phenyl]acetyl]-L-isoleucyl-CN (4R)-4-hydroxy-L-prolyl-3-amino-2-oxohexanoylglycyl-N, N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

C42 H58 N6 09 MF

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 8 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN367258-29-5 REGISTRY

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, N-[1-(aminooxoacetyl)butyl]-5,5-dimethyl-11,14-dioxo-12phenyl-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

STEREOSEARCH FS

C32 H40 N4 O7 MF

SR

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 9 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN 367258-28-4 REGISTRY

RN

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]butyl]-12-phenyl-, (7R,9S,12S)- (9CI) NAME)

FS STEREOSEARCH

MF C35 H44 N4 O7

SR CA

LCSTN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

- L3 ANSWER 10 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN
- RN 367258-27-3 REGISTRY
- CN Glycinamide, (2S)-N-[[3-(3-hydroxy-3-methylbutoxy)phenyl]acetyl]-2-phenylglycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2-oxohexanoylglycyl-N,N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)
- FS PROTEIN SEQUENCE; STEREOSEARCH
- MF C44 H54 N6 O9
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

- L3 ANSWER 11 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN
- RN 367258-26-2 REGISTRY
- CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxamide, N-[1-(aminooxoacetyl)butyl]-5,5-dimethyl-11,14-dioxo-12-propyl-, (7R,9S,12S)- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C29 H42 N4 O7
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 12 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

367258-25-1 REGISTRY RN

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]butyl]-12-propyl-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C32 H46 N4 O7

SR CA

STN Files: LC CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 13 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN 367258-24-0 REGISTRY

Glycinamide, N-[[3-(3-hydroxy-3-methylbutoxy)phenyl]acetyl]-L-norvalyl-CN (4R)-4-hydroxy-L-prolyl-3-amino-2-oxohexanoylglycyl-N, N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

MF C41 H56 N6 O9

SR CA

STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 14 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN 367258-23-9 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9carboxamide, N-[1-(aminooxoacetyl)butyl]-12-(1,1-dimethylethyl)-5,5dimethyl-11,14-dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MFC30 H44 N4 O7

SR

STN Files: LC CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 15 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-22-8 REGISTRY

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 12-(1,1-dimethylethyl)-5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]butyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H48 N4 O7

SR

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 16 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

367258-21-7 REGISTRY RN

Glycinamide, N-[[3-(3-hydroxy-3-methylbutoxy)phenyl]acetyl]-3-methyl-L-CN valyl-(4R)-4-hydroxy-L-prolyl-3-amino-2-oxohexanoylglycyl-N, N-dimethyl-2phenyl-, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C42 H58 N6 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 17 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-20-6 REGISTRY

CN .beta.-Alanine, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2oxohexanoyl-, 1,1-dimethylethyl ester, cyclic (1.fwdarw.2)-ether (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C39 H58 N4 O9

SR

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 18 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-19-3 REGISTRY

CN .beta:-Alanine, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3-methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2-oxo-5-hexenoyl-, 1,1-dimethylethyl ester, cyclic (1.fwdarw.2)-ether (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C39 H56 N4 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 19 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-18-2 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxamide, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2-propenylamino)acetyl]-3-butenyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C35 H48 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 20 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-17-1 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxamide, N-[3-amino-1-(cyclopropylmethyl)-2,3-dioxopropyl]-12-cyclohexyl-5,5-dimethyl-11,14-dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H46 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 21 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-16-0 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxamide, N-[1-(aminooxoacetyl)-4-pentenyl]-12-cyclohexyl-5,5-dimethyl-11,14-dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

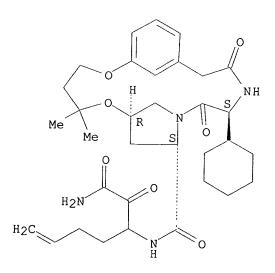
FS STEREOSEARCH

MF C33 H46 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE. 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 22 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

367258-15-9 REGISTRY RN

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]-4-pentenyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C36 H50 N4 O7

SR

LCSTN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 23 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

367258-14-8 REGISTRY RN

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, N-[1-(aminooxoacetyl)pentyl]-12-cyclohexyl-5,5-dimethyl-11,14dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C33 H48 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 24 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN 367258-13-7 REGISTRY

RN

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamidé, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]pentyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

STEREOSEARCH FS

MF C36 H52 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 25 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

367258-12-6 REGISTRY RN

Glycinamide, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3-CN methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2oxoheptanoylglycyl-N, N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C45 H62 N6 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 26 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-11-5 REGISTRY

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-N-[1-[oxo(2propenylamino)acetyl]butyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C35 H50 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 27 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN 367258-10-4 REGISTRY

CN Glycine, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2oxohexanoyl-, cyclic (1.fwdarw.2)-ether (9CI) (CA INDEX NAME)

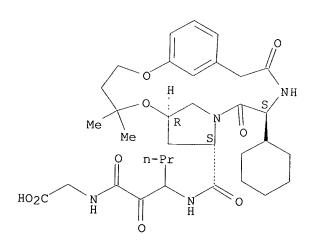
FS STEREOSEARCH

MF C34 H48 N4 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 28 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN 367258-09-1 REGISTRY

Glycine, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3-CN methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2oxohexanoyl-, phenylmethyl ester, cyclic (1.fwdarw.2)-ether (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C41 H54 N4 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 29 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-08-0 REGISTRY

2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-CN carboxamide, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-N-[1-[oxo[(phenylmethyl)amino]acetyl]butyl]-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C39 H52 N4 O7

SR

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 30 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367258-03-5 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxamide, N-[3-amino-1-(cyclobutylmethyl)-2,3-dioxopropyl]-12-(2,3-dihydro-1H-inden-2-yl)-5,5-dimethyl-11,14-dioxo-, (7R,9S,12S)- (9CI) (CA INDEX NAME)

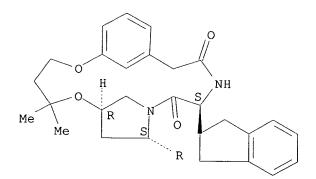
FS STEREOSEARCH

MF C37 H46 N4 O7

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A



PAGE 2-A

$$\begin{array}{c|c} R & H \\ O & \\ H_2N & O \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 31 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367257-96-3 REGISTRY

CN Glycinamide, (2S)-2-(2,3-dihydro-1H-inden-2-yl)-N-[[3-(3-hydroxy-3-methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2-oxohexanoylglycyl-N,N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C47 H58 N6 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

$$\begin{array}{c|c} R & H & Pr-n \\ \hline O & H & O & Ph \\ \hline N & N & S & NMe_2 \\ \hline \end{array}$$

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

ANSWER 32 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN L3

RN 367257-62-3 REGISTRY

Glycine, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3-CN methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2oxohexanoylglycyl-2-phenyl-, 1,1-dimethylethyl ester, cyclic (1.fwdarw.2)-ether, (2S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C46 H63 N5 O10

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

L3 ANSWER 33 OF 33 REGISTRY COPYRIGHT 2003 ACS on STN

RN

367257-61-2 REGISTRY Glycinamide, (2S)-2-cyclohexyl-N-[[3-(3-hydroxy-3-CN methylbutoxy)phenyl]acetyl]glycyl-(4R)-4-hydroxy-L-prolyl-3-amino-2oxohexanoylglycyl-N, N-dimethyl-2-phenyl-, cyclic (1.fwdarw.2)-ether, (2S)-(CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

MF C44 H60 N6 O9

SR CA

LC STN Files: CA, CAPLUS, USPATFULL **RELATED SEQUENCES AVAILABLE WITH SEQLINK**

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 18:58:27 ON 29 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 29 Jul 2003 VOL 139 ISS 5 FILE LAST UPDATED: 28 Jul 2003 (20030728/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

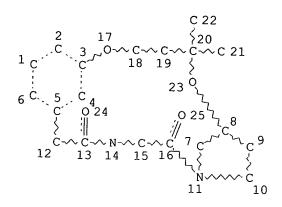
NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L3 33 SEA FILE=REGISTRY SSS FUL L1
L4 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

L5 STR



NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

=> =>

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L7 35 SEA FILE=REGISTRY SSS FUL L5 $rac{1}{8}$

2 SEA FILE=REGISTRY ABB=ON PLU=ON L7 NOT L3 L9 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 NOT L4

=> d ibib abs hitrn 19 1

L9 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:221307 HCAPLUS

DOCUMENT NUMBER: 136:386105

TITLE: Syntheses of Novel 4-tert-Alkyl Ether Proline-Based

16- and 17-Membered Macrocyclic Compounds

AUTHOR(S): Chen, Kevin X.; Njoroge, F. George; Vibulbhan, Bancha;

Buevich, Alexei; Chan, Tze-Ming; Girijavallabhan,

Viyyoor

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ,

07033, USA

SOURCE: Journal of Organic Chemistry (2002), 67(8), 2730-2733

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER:

American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE:

English GΙ

AB Starting from N-Cbz-4-hydroxyproline Me ester, a boron trifluoride-diethyl etherate-catalyzed reaction provided 4-tert-alkyl ether proline. Two deprotections and amide bond formations furnished a phenol alc.

Macrocyclization was accomplished through a Mitsunobu reaction using triphenylphosphine and 1,1'-(azodicarbonyl)dipiperidine to afford novel 16- and 17-membered proline-based macrocyclic compds. of type, e.g., I.

IT 367261-09-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn.of 4-tert-alkyl ether proline-based 16- and 17-membered macrocyclic compds.)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Ι

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 JUL 2003 HIGHEST RN 556740-18-2 DICTIONARY FILE UPDATES: 28 JUL 2003 HIGHEST RN 556740-18-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> => => d ide can 18 1-2

L8 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367261-09-4 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxylic acid, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-, methyl ester, (7R,9S,12S)- (9CI) (CA INDEX NAME)

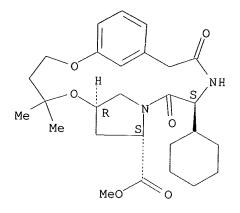
FS STEREOSEARCH

MF C27 H38 N2 O6

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1947 TO DATE)

2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:386105

REFERENCE 2: 135:318715

L8 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN

RN 367259-03-8 REGISTRY

CN 2,6-Dioxa-10,13-diazatricyclo[14.3.1.17,10]heneicosa-1(20),16,18-triene-9-carboxylic acid, 12-cyclohexyl-5,5-dimethyl-11,14-dioxo-, (7R,9S,12S)-(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C26 H36 N2 O6

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:318715